Cyclopropanation of $\alpha,\beta$- Unsaturated Aldehydes with a Supported Peptide

**Significance:** The amphiphilic resin-supported peptide 1 catalyzed the diastereo- and enantioselective cyclopropanation of aromatic $\alpha,\beta$-unsaturated aldehydes 2 with dimethylphenacylsulfonyl bromide in the presence of NaHCO$_3$ to give the corresponding cyclopropanes 3 in 83–88% yield with 98–99% ee and 92–97% diastereoselectivity (9 examples, eq. 1). In the formation of 3g, the catalyst was recovered by filtration and reused five times without significant loss of its catalytic performance (1$^{\text{st}}$ reuse: 87% yield, 99% ee, 94% diastereoselectivity; 5$^{\text{th}}$ reuse: 83% yield, 99% ee, 95% diastereoselectivity).